COST and MANAGEMENT

VOL. XXVI SEPTEMBER No. 8

MEASUREMENT OF PROFIT FOR EXECUTIVE DECISIONS

Renneth F. Byrd, M.A., B.Sc. (Economics), C.A., is Professor of Accounting at McGill University. Formerly, a first Professor of Accounting and Auditing at Natal University College, Durban, South Africa, he was appointed to his present post in 1948. He is a member of the Institute of Chartered Accountants in England and Wales, the Natal Society of Accountants in South Africa, and the Montreal Chapter of The Society of Industrial and Cost Accountants.

MAINTAINING A PROPER BALANCE IN BUSINESS MANAGEMENT

By Willis T. Windle 298

Mr. Windle is Treasurer and Controller of the Carborundum Company, Niagara Falls, N.Y., and the Canadian Carborundum Company, Niagara Falls, Ontario. He was born and educated in Chicago where he attended Northwestern University majoring in Accounting. In addition to his activity in business and industry he taught Accounting at the University of Pittsburg and Penn State College from 1942 to 1948. Both this article and the article by Professor Byrd were presented at Technical Sessions of the Eleventh Annual Ontario Conference last June.

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SOCIETY NOTES





JOHN FERGUSON

FRANK THOMSON

MANITOBA, QUEBEC STUDENTS WIN NATIONAL AWARDS

The Gold Medals for students attaining the highest national standing in Cost Accounting courses have been won by Frank Thomson and John Ferguson. Mr. Thomson ranked first in Advanced Cost Accounting and Mr. Ferguson topped all other candidates in Fundamentals of Cost Accounting.

For many years the Provincial Societies across Canada have honoured outstanding achievement in course study, but this is the first time that national proficiency awards have been given.

The Gold Medals, which are to be awarded annually were contributed through the generosity of H. M. Hetherington and D. R. Harrison, both of whom are past National Presidents. The Hetherington Medal and the Harrison Medal denote high standing in Advanced Cost Accounting and Fundamentals of Cost Accounting respectively.

SOCIETY NOTES

The winner of the Hetherington Medal, Mr. Thomson, lives in Montreal and is Supervisor of the Chemicals Department of Canadian Industries Limited.

He was born in England and during the war served five years with the R.A.F. on the Atlantic Ferry Command. A radionavigator, Mr. Thomson held the rank of Flight Lieutenant before taking his discharge in Canada. Immediately after discharge he joined C.I.L. and is presently responsible for the forecasting, analysis and interpretation of financial operating results.

Mr. Thomson received his early education at Merchant Taylor's School in England. After his stint in the services, he enrolled in the Advanced Management and Administration course at McGill University. He has since, passed the examinations in this course, in addition to those leading to the R.I.A. degree. At present, he is preparing a thesis on "Controllership in Practice", to be submitted as the final qualification for his degree.

The winner of the Harrison Medal, John Ferguson, was born and educated in Winnipeg, Manitoba. He received his early training at Principal Sparling School and Daniel McIntyre Collegiate. After graduation from high school, he took evening classes at Business College. It was not until 1950, however, that he enrolled in the Society's course.

Accountant and Purchasing Agent for Sherritt Gordon Mines Ltd. at Lynn Lake, Manitoba, Mr. Ferguson has 26 years of experience in the mining industry behind him. Temporarily, he has been working on purchasing and accounting in Toronto in connection with his company's metallurgical plant under construction at Fort Saskatchewan, Alberta. On completion of the project, he will be transferred to Fort Saskatchewan as Chief Clerk in charge of office, accounting, and purchasing.

Living in isolated communities for the past 18 years, Mr. Ferguson has taken an interest in many community organizations and has held a number of offices in local government. His duties have included everything from Postmaster to Justice of the Peace. A member of the National Association of Purchasing Agents as well as the Society of Industrial and Cost Accountants, he hopes to be able to participate actively in these organizations while in Fort Saskatchewan.

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Examination Results, 1952

In the 1952 Examinations of the Society, the following students obtained pass standing in the subjects listed:—

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Abercrombie, John F., Calgary Brownoff, N. L., Edmonton Caddel, J. G., Edmonton Cieslak, Stan, Edmonton Clissold, J. H., Edmonton Freeman, H., Calgary Hazlett, G. O., Edmonton Hill, R. H., Calgary Lewis, F. N., Edmonton Roseborough, A. W., Edmonton Wiley, E. R., Calgary

THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF BRITISH COLUMBIA

Carlson, D. J. L., White Rock Christison, V., Victoria Dean, Gordon, Vancouver Feldman, S., Vancouver Ferris, Miss B., Vancouver Hutchison, C. N., Vancouver Jacobsen, Peter D., Vancouver

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Matthew, Fred, Vancouver Milne, Lamond, Vancouver Owen, G. E., Vancouver Stashuk, John, Vancouver Thompson, R. L., New Westminster

THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF MANITOBA

Ferguson, John, Lynn Lake Friend, R. L., Winnipeg Jefferies, A. D., Charleswood Kryschuk, Jerry, Winnipeg Lyons, A. C. H., Winnipeg Patrick, Tom, Winnipeg Reilly, H. H., Varsity View Stainton, Wm. T., St. James Tippett, G. D., St. James

THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF ONTARIO

Adair, Thos. W., Ottawa Baczynski, T. S., Hamilton Barnett, D. E., Downsview Black, E. G., Windsor Bloomfield, C. M., Toronto Britten, H., Port Arthur Britten, Ivy, Port Arthur Brown, H., Hamilton Caddo, C. R., Fort William Chadder, R. E., Elora Cooley, Ralph, Hamilton Cooper, Lorne R., Fenwick Cross, N. S., Toronto Drombolis, Marino, Fort William Fors, Paul B., Port Arthur Frederickson, C. F., Toronto Funamoto, G. W., Hamilton Griner, John R., Toronto Henderson, J. V., Hamilton Kidd, K. A., Peterborough Kyle, V. D., Toronto

Laing, James H., Brantford LeNoury, R., Hamilton Macklem, Wm. D., Ancaster MacMillan, M., Port Arthur Mead, J. F., Port Arthur Michener, N. K., Welland Miller, H. B., Kitchener Northcott, A. G., Hamilton O'Donnell, L. W., Hamilton Owen, Alfred, Thorold Pattison, R. A., Port Arthur Riddell, J. A., Hamilton Shaffer, Harry, Fort William Steggall, M. E., Britannia Heights Tremblay, C. P., Hull, Que. Tusch, J. A., Elmira Wiffen, Harry F., Oakville Williams, V. A., Hamilton Williams, W. E., Hamilton Wolff, C. K., Ottawa Wood, Eric, Haviland

THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF QUEBEC

Adams. John, Montreal Arsenault, Paul E., Quebec City Beaudoin, R., Montreal Blake, E. G., Montreal Boulanger, Jacques, Quebec City Boutin, Roland, Quebec City Buisson, G., St. Maurice Valley Chapais, Thomas, Quebec City Collette, R., Montreal Couture, R. A., Montreal Dahms, E., Montreal Desjardins, H., Montreal Forest, B., Montreal Fortin, Maurice, Quebec City

Fox, G., Montreal
Gingras, Benoit, Quebec City
Grimard, Pascal, Quebec City
Hackland, J. G.,
St. Maurice Valley
Harnish, E., Montreal
Huard, Yvon, Quebec City
Joeck, W. F., Montreal
Ladouceur, Roland, Quebec City
Lafleur, Lucien G., Quebec City
Lanfranchi, L., Montreal

Lazier, F. C., Montreal
Marceau, Vincent, Quebec City
McCarthy, J., Montreal
Morin, Angenard, Quebec City
Pike, A. E., Montreal
Poulin, Claude. Eastern Townships
Reid, A. R., Montreal
Stephenson, J. F., Montreal
Stevens, G. H., Montreal
Taylor, C., Montreal
Thomson, F., Montreal

FUNDAMENTALS OF COST ACCOUNTING - QUEBEC CHAPTER

Arsenault, Paul Egide Beauchesne, Raoul Boucher, Fernand Boudreau, Louis Boulanger, Jacques Boulet, Jean-Claude Bouliane, Jean Philippe Bussieres, Yves Chapais, Thomas Couillard, Raymond Coulombe, Robert Dessurault, Gerard Dion, Yves Dore, Paul Drapeau, Marguerite, Miss Fortin, Maurice Fugere, Jean Marie Garneau, Jean Louis

Gauthier, Raymond
Genois, Claude
Gingras, Benoit
Houde, Joseph Eugene
Huard, Yvon
Lachance, Georges Henri
Ladouceur, Roland
Lefrancois, Roger
Lemay, Adelard
Letarte, Francois
Levasseur, Edgar
Marceau, Vincent
Morin, Angenard
Morneau, Remi
Motard, Robert
Pellerin, Fernand
Rochette, Fernand

INDUSTRIAL LEGISLATION - QUEBEC CHAPTER

Archer, Robert
Arsenault, Paul E.
Bergeron, Victorin
Boulanger, Jacques
Bouliane, Jean Philippe
Boutin, Roland
Brunelle, Andre
Bussieres, Yves
Chasse, Jean
Couillard, Raymond
Dessurault, Gerard
Garneau, Jean Louis
Giguere, Clermont
Gingras, Benoit

Gregoire, Jean Guy Grimard, Pascal Guerard, Paul Eugene Houde, Joseph Eugene Lachance, Georges H. Ladouceur, Roland Lafleur, Lucien G. Mignault, Andre Moreau, Rejean Morin, Angenard Pelletier, Yvon Premont, Felicien Proulx, Charles

INDUSTRIAL ORGANIZATION AND MANAGEMENT - QUEBEC CHAPTER

Archer, Robert Bergeron, Victorin Boissonneault, Louis Boucher, Fernand Boudreau, Louis Bouliane, Jean Philippe Boutin, Roland Bussieres, Yves Chapais, Thomas Couillard, Raymond Coulombe, Robert Dessurault, Gerard Dion, Yves Foriter, Claude

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EXAMINATION RESULTS (CONTINUED)

Fortin, Maurice
Fugere, Jean Marie
Gingras, Benoit
Godin, Camille
Gregoire, Jean Guy
Houde, Joseph Eugene
Ladouceur, Roland
Lafleur, Lucien G.
Lafond, Gerard
McNicoll, Benoit

Mignault, Andre Minguy, Jean Paul Moreau, Rejean Morin, Angenard Morneau, Remi Motard, Robert Pelletier, Yvon Poulin, Jean Paul Rochette, Fernand Viens, Gaston

PERSONALS

- J. H. REID, C.A., was appointed Vice-President of Standard Paving and Materials Limited. Mr. Reid is well known in Toronto business circles and has been an active member of the Toronto Chapter for many years.
- R. O. SPILLER, R.I.A., became Treasurer of Reliance Petroleum Limited of London, Ontario, in July. Formerly Comptroller, he came to Canada after spending several years in South America working on the production end of the Petroleum Industry.
- J. B. TENNANT, R.I.A., joined Fruehauf Trailer Co. of Canada Ltd. as Controller. A Past President of the Ontario Society, Mr. Tennant has gained a wide and varied background of experience in industry and through industrial organizations.

New Members

BAY OF QUINTE CHAPTER

A. M. Richards, The Houston Company Ltd., Belleville, Ont.

NON-RESIDENT BRITISH COLUMBIA

J. M. Cobbin, Wood & McClay Ltd., Beaton, B.C.

HAMILTON CHAPTER

Jack C. Cunningham, Scott Paint & Supplies Ltd. H. P. Sellers, C.A., Riddell, Stead, Graham & Hutchison

MONTREAL CHAPTER

J. M. King, Dominion Tar & Chemical Co. Ltd.

A. Chaurette, David & Frere

B. Zdobylak, Tara Trading Co. Ltd.

G. James, Vapor Car Heating Co. Canada Ltd.

John Gauthier, Dominion Structural Steel.

NON-RESIDENT ONTARIO

John A. Montgomery, Dominion Tar & Chemical Co. Ltd., Cornwall, Ont.

TORONTO CHAPTER

Paul Binkley, R. Laidlaw Lumber Co. Ltd.

Hugh C. Upper, Dearborn Chemical Company Limited

VANCOUVER CHAPTER

James H. Broadhead, Canadian (B.C.) Telephones & Supplies Ltd. J. Mervyn Rowlands, Vancouver Engineering

WINDSOR CHAPTER

Charles K. Worthy, Ford Motor Co. of Canada Ltd.

WINNIPEG CHAPTER

John Rodgers, John Wood Co. Ltd.

THE SIXTH INTERNATIONAL CONGRESS ON ACCOUNTING 1952

RECORD OF PROCEEDINGS

The Sixth International Congress on Accounting, 1952, proposes to publish an account of the proceedings of the Congress in book form. The book will contain a report of all speeches and discussions, reports on all the social events, names of those attending the Congress and all papers which were contributed on the five subjects discussed at the Congress.

Those wishing to receive copies of the book should forward their applications to the Secretary, Sixth International Congress on Accounting, c/o The Institute of Chartered Accountants in England and Wales, Moorgate Place, London, E.C.2, stating the number of copies required and the address or addresses to which they should be sent.

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By N. R. BARFOOT, R.I.A.

CURRENT ECONOMICS

1st Quarter Comparison — 1951-1952						
Labour income	14%	higher	1952			
Farm cash income	18%	higher	1952			
Retail sales	3%	higher	1952			
Retail charge and installment accounts	12%	lower	1952			
General level of manufacturing	4%	lower	1952			
Export trade	21%	higher	1952	values	only	
Import trade	7%	higher	1952	values	only.	

Household appliances, furniture and automobiles are at substantially lower levels in 1952. Price changes accounted for the increase in retail sales.

PROGRESS IN CANADIAN MANUFACTURE

Number of manufacturing plants	1900	1950
(over 15 employees)	18,000	36,000
Number of employees in manufacturing .	350,000	1,200,000
Capital investment in manufacturing	\$200 million	\$6.5 billion
Manufacturing output value	\$500 million	\$14 billion
Value of output per employee	\$1,400	\$11,500
Investment per employee	\$600	\$ 5,500
Average Earnings	\$1,100	\$ 2,300
Union membership	15.000	over 1 million

TEXTILE SLUMP

Recent analysis of the World textile situation points up the major difficulties of the trade:

Capicity has been expanded by the industry beyond the point of absorption by domestic and foreign markets.

Production of cotton textiles has risen since the beginning of the present century by 50% but world exports of the same material have fallen by 40%.

During this time the non-industrial nations who imported textiles were industrialized and adding capacity.

The loss of these markets became therefore, permanent and the heavy textile producing nations so dependent on export were hit very hard.

Some elaborate system of controls is indicated or sporadic competition and chronic unemployment will result.

LIFO FOR INVENTORIES

A recent judgment handed down from the Exchequer Court accepts for the first time in Canada the last-in, first-out method of inventory accounting for income tax purposes.

C. & M. ROUND-UP

The Income War Tax Act had no provision for inventory accounting. The Income Tax Act of 1948 stipulates that inventories shall be valued at the lesser of market or cost, or by such other means as the minister may allow by regulation.

LIFO has been rejected consistently by the Canadian tax administration though it had been written into the tax laws of the U.S. in 1938.

The court judgment accepts use of the LIFO method of inventory accounting under a certain set of circumstances. These can be summarized briefly as follows:

Where a company does not make speculative purchases of inventory; Where a company replaces, during the year, the amount drawn from the stockpile for production of the finished product that is sold in the year.

Where inventories are of such a nature that there is no need for a physical movement on determined "First-In-First Out" basis.

EDITOR'S NOTE:

According to reports, the Government's legal experts have not decided yet whether the Exchequer Court decision will be applicable under the 1949 Act. It is expected that if, in their opinion, the decision could be used under the new Act, the decision will be appealed to the Supreme Court.

The important obstacle in using the decision is Section 14, Sub-Section 1, of the Income Tax Act, which states that a taxpayer has to follow a method for computing income from a business which has been accepted for Income Tax assessment purposes, unless the Minister concurs in the adoption of a different method. In order to make use of the LIFO method, it would therefore be necessary that the taxpayer has used this method consistently. If that is not the case, the switch from FIFO or any other method to LIFO would, in all probability, be considered a change of method. This, of course, is by no means certain as there exists no definition of the term "costs" used in Section 14, Sub-Section 2, and in Part XVIII regulations issued thereunder. It could well be that any further dispute on the admissibility of LIFO will centre around the question whether any change in the determination of costs is change of methods as defined in Section 14, Sub-Section 1. If this question is answered affirmatively, then the Exchequer Court decision could have practical value only for companies starting out anew and therefore in the position of adopting a method of income determination not subject to the concurrence of the Minister. It should be hoped, though, that the decision of the Exchequer Court will at least influence the thinking on the question of the admissibility of LIFO and maybe start a movement to have the problem considered by the Government.

NAVY

1939-6 ships, 3,600 personnel

1952-26 ships, 13,500 personnel.

Projected-100 ships, 20,000 personnel.

A 200 million dollar expansion program has in various stages of construction or on the books, 14 destroyer escorts, 14 coastal minesweepers, 5 gate vessels and many smaller craft.

In 1951, our total procurement of bauxite came 94% by sea and 6% by land; manganese ore, 57% by sea; tin, 73%, natural rubber, 98.5%; sugar, 84% (16% was domestic); wool, 80% (15% domestic), etc.

COMPANIES ACT

Of general interest to accountants are the following proposed changes affecting the Ontario Companies Act which are presently being studied by the select committee of the Legislature:—

1. Election of Directors

Voting for the election of directors, on the basis of each shareholder being entitled to votes in number equal to the number of shares held, multiplied by the number of directors to be elected, with the right to vote such total all for one director or to distribute the total among such candidates as is deemed desirable.

2. Directors Trading in Capital Stock of Public Companies

It was felt advisable to insert in the re-draft a provision for further study which will require the directors to give information of their trading in shares of a public company where the request for the information is made at least 30 days before the annual meeting by a percentage of the shareholders of sufficient size to indicate the serious desire to obtain the information. In that case, the information will be made available at the annual meeting.

3. Retirement Age for Directors of Public Companies

Consideration is being given to the provisions of the English Companies' Act and a report on the practical value of the requirements contained in that Act is awaited from England.

4. Proxy Requirements

An effort is being made to find a satisfactory formula to assure that stock in street names is voted only as desired by the real or beneficial

5. Re-Organization of Companies

Some protection to minority dissenting shareholders will be indicated in the re-draft following the practice in England and some of the states of the U.S.

6. Information to Shareholders

Greatly improved provisions are contained for information to be given to shareholders of financial statements and reports at annual meetings and all public companies will be required to send this information to shareholders at least 10 days before the annual meeting with the right to members of private companies and co-operatives to receive similar information on request.

7. Winding Up and Dissolution

The provisions for the new winding up and dissolution of companies are being studied with a view to meeting a number of practical problems and overcoming obstacles to finality in the affairs of defunct companies.

8. Liability for Wages

The liability for wages and the priority for wage claims in winding up proceedings will be extended to include accrued vacation pay in keeping with Labor Legislation relating to holidays with pay.

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CURRENT ARTICLES OF INTEREST TO INDUSTRIAL ACCOUNTANTS

ACCOUNTANTS

SELECTING AND TRAINING ACCOUNTING STAFF, by Donald E. Chapman, N.A.C.A.

Bulletin --- July 1952, Sec. 1.

ACCOUNTING

- ACCOUNTING IN RELATION TO CHANGES IN PURCHASING POWER OF MONEY —
 The Journal of Accountancy, August 1952.
- ACCOUNTING LEADERSHIP AND RESPONSIBILITIES IN INDUSTRY, by Fladger F. Tannery — The Accounting Review, July 1952.
- A CRITIQUE OF ACCOUNTING TRENDS AND TECHNIQUES—1951 Edition, by Robert H. Gregory—The Accounting Review, July 1952.
- THE IMPACT OF RELATIVISM ON ACCOUNTING, by Konrad Engelmann The Accounting Review, July 1952.
- NEW HORIZONS IN ACCOUNTING—PART I, by R. L. Mathews—The Australian Accountant, April 1952.
- NEW HORIZONS IN ACCOUNTING—PART II, by R. L. Mathews—The Australian Accountant, May 1952.
- NEW HORIZONS IN ACCOUNTING—PART III, by R. L. Mathews—The Australian Accountant, June 1952.

ASSETS, FIXED

ACCOUNTING BASED ON HISTORICAL COST—The Accountants' Magazine—July 1952,

COST DATA

COST FACTORS IN PRICE-MAKING—PART I: IN A FREE ECONOMY, by Howard Clark Greer—Harvard Business Review, July-August 1952.

COST REDUCTION

A COST REDUCTION DEPARTMENT, by F. W. Wagner, Jr.—N.A.C.A. Bulletin, July 1952, Sec. 1.

ECONOMICS

- ACCOUNTING IN RELATION TO CHANGES IN PURCHASING POWER OF MONEY—
 The Journal of Accountancy, August 1952.
- INFLATION AND INCOME DETERMINATION: THE TUCKER REPORT BY THE JOURNAL STAFF—The Journal of Accountancy, July 1952.

EDUCATION AND TRAINING

THE TRAINING OF MANAGEMENT ACCOUNTANTS, by H. Wilmot, C.B.E., F.C.W.A.

—The Cost Accountant, June 1952.

FINANCIAL STATEMENT

- A NEW TECHNIQUE FOR REPORTING FINANCIAL TRANSACTIONS, by R. K. Mautz, C.P.A.—The Journal of Accountancy, July 1952.
- PREPARATION OF INTERIM FINANCIAL STATEMENTS IN A MANUFACTURING CONCERN, by James D. Wilson—The Canadian Chartered Accountant, July 1952.

CURRENT ARTICLES OF INTEREST

FORMS

HOW TO CONTROL, ESTABLISH, ELIMINATE OFFICE PAPERWORK, by P. N. Wehr, C.P.A.—The Journal of Accountancy, July 1952.

INSTALMENT SALES

THE RATE OF INTEREST IN INSTALMENT PAYMENT PLANS, by Hugh E. Stelson— The Accounting Review, July 1952.

INVENTORIES

- CONTROL OF PARTS INVENTORIES AT SALES BRANCHES, by Paul T. Sherwood
 —N.A.C.A. Bulletin, July 1952, Sec. 1.
- TECHNIQUES FOR CONTROL OF FINISHED GOODS INVENTORY, by B. H. Semler—N.A.C.A. Bulletin, July 1952, Sec. 1.
- THREE CASES WHERE SCIENTIFIC SAMPLING HALVED CLERICAL TIME, by C. D. Smith, Ph.D.—The Journal of Accountancy, July 1952.

MAINTENANCE

- HOW YOU CAN PUT WORK SAMPLING TO WORK, by C. L. Brisley—Factory Management and Maintenance, July 1952.
- MAINTENANCE SCHEDULING PLAN, by C. E. Stephenson—Factory Management and Maintenance, July 1952.
- SYMPOSIUM ON MAINTENANCE COST CONTROL N.A.C.A. Bulletin, July 1952, Sec. 1.
- WORK MEASUREMENT FOR MAINTENANCE CONTROL, by Robert A. Dilley—Factory
 Management and Maintenance, July 1952.
- WORK SAMPLING: A NEW TOOL OF MANAGEMENT—Factory Management and Maintenance, July 1952.

MANUALS

INDUSTRY ACCOUNTING MANUALS TO-DAY, by D. G. Mackenzie—N.A.C.A. Bulletin, July 1952, Sec. 1.

MATERIAL CONTROL

A STUDY IN MATERIALS CONTROL, by William A. Muller—N.A.C.A. Bulletin, July 1952, Sec. 1.

MOTION PICTURES

AMORTIZATION SCHEDULES FOR MOTION PICTURES, by William I. Greenwald— The Accounting Review, July 1952.

PRICING

COST FACTORS IN PRICE-MAKING—PART I: IN A FREE ECONOMY, by Howard Clark Greer—Harvard Business Review, July-August 1952.

PRODUCTION CONTROL

- PLANT CAPACITY: TOO MUCH OR TOO LITTLE? by Stahrl Edmunds—Harvard Business Review—July-August 1952.
- TIGHTENING WORK STANDARDS, by H. Edward Wrape—Harvard Business Review, July-August 1952.

PRODUCTIVITY

THE SIGNIFICANCE OF PRODUCTIVITY DATA, by John Diebold—Harvard Business Review, July-August 1952.

PURCHASING POWER

INCOME: A MEASUREMENT OF CURRENTLY ADDED PURCHASING POWER
THROUGH OPERATIONS, by Donald L. Raun—The Accounting Review,
July 1952.

QUALITY CONTROL

HOW SCIENTIFIC SAMPLING CONTROLS ACCURACY IN INVOICING, by R. B. Shartle—The Journal of Accountancy, August 1952.

REPORTS

ARE CORPORATE ANNUAL REPORTS DIFFICULT, DULL READING? by Pashalian & Crissy—The Journal of Accountancy, August 1952.

PRIME OBJECT OF ACCOUNTANTS' REPORTS—PART I, by Wilfred Reetz—Irish Accountant and Secretary, May 1952.

RESERVES

FUNDS FOR STABILITY, by Joseph L. Snider—Harvard Business Review, July-August 1952.

STANDARD COSTS AND COSTING

WHEN TO USE STANDARD COST IN PRICE PROCUREMENT CONTRACTS, by H. W. Wright, C.P.A. — The Journal of Accountancy, August 1952.

SUBSCRIPTION BOOKS

ACCOUNTING FOR SUBSCRIPTION INCOME, by R. N. Anthony—The Accounting Review, July 1952.

SYSTEMS

ACCOUNTING SYSTEM OF THE NEW JERSEY TURNPIKE, by Henry A. Wegener— N.A.C.A. Bulletin, July 1952, Sec. 1.

TRAINING PERSONNEL

SELECTING AND TRAINING ACCOUNTING STAFF, by Donald E. Chapman—N.A.C.A.
Bulletin, July 1952, Sec. 1.

WELFARE PLAN

RETIREMENT PROGRAMS FOR INDUSTRIAL WORKERS, by Laurence J. Ackerman & Walter C. McKain, Jr.—Harvard Business Review, July-August 1952.

ADDRESS OF PUBLICATIONS

The Accountants' Magazine, 4 Rothesay Place, Edinburgh 3, Scotland.

N.A.C.A. Bulletin, 505 Park Ave. (Fourth Floor), New York 22, NY.

The Canadian Chartered Accountant, 10 Adelaide St. E., Toronto, Ont.

The Journal of Accountancy, 270 Madison Ave., New York 16, N.Y.

The Cost Accountant, 63 Portland Place, London W.1, England.

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The Accounting Review, 450 Ahnaip Street, Menasha, Wisconsin.

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Harvard Busines Review, Gallatin House, Soldiers Field, Boston 63, Mass

Factory Management and Maintenance, 330 W. 42nd St., New York 36, N.Y.

The Measurement of Profit for Executive Decisions

By KENNETH F. BYRD

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The different bases for measuring operating efficiency are reviewed by the author, but he emphasizes the necessity of converting accounts to common dollar values to insure a sound executive analysis of business income.

In addressing a conference of people who are assembled, in somewhat of a holiday spirit, no doubt, more or less far from the place of their daily labours, I am reminded of certain lines of Charles Lamb's:

"Who first invented work and bound the free And holy-day rejoicing spirit down

To that dry drurgery at the desk's dead wood?"

Lamb's answer to that was: "Sabbathless Satan." He, an ethereal spirit if ever there was one, knew the daily calls of business life as "dry drudgery" at the "desk's dry wood," but to-day we know that this need not be so. The industrial accountant has countless opportunities for variety in self-expression and interpretive analysis, exploring unchartered seas in accounting ventures. He has opportunities for the use of initiative and personal abilities which lift him far above the mechanical creature represented by Charles Lamb as a business man. Lamb was truly himself only as a writer of great literature, but the accountant will find imagination and even adventure in the interpretation of day-to-day transactions.

Information for Management

A leading article in the "Accountant" some time ago discussed the subject "Information for Management" on the basis of a booklet written by David Solomons, Reader in Accounting at the London School of Economics, for the Industrial and Commercial Finance Corporation, Ltd. Mr. Solomons has drafted a statement for presentation to management in

^{1&}quot;The Accountant", January 27, 1951, page 75.

respect of each successive period of four weeks, comprising seven sections:

- (1) Orders on Hand—Here opening orders on hand and new orders booked; less cancellations, are offset against net sales. From the resulting orders on hand at the end of the period is deducted the closing work in progress estimated at selling price, to leave the value at selling price of work on hand at that date. Not only are the actual figures for the current period given but also the budgeted figures, the cumulative actual and budgeted figures for the year to date, the previous year's actual figures to the corresponding date, and the budget for the next period. Here immediately are seen the points of comparison needed for proper control by any executive. Ordinary accounting has its eye on the past, but to management the past can be of real significance only as a guide to the immediate present and the future. All three must constantly be brought into the closest association.
- (2) Revenue—This section contains an Income Statement in traditional form for each of the periods mentioned in (1). For management purposes a form more adapted to bring out points of economic significance would seem to be preferable, and I shall shortly have something to say about this. At any rate the essential point is that mere consideration of an annual profit and loss statement is obviously useless to management, whose duty it is constantly to keep its fingers on the pulse of the business. Four-weekly statements present information not more than four weeks after the event, in time for corrective action to be taken where things seem to be going wrong and for a change of policy in line with changing economic conditions. In this age of inflation the financial scene tends to change so rapidly that a management which relied on annual returns would never have its business under proper control. The fourweekly returns must be a stimulant to action. Matters which have no effect on policy need not be separately reported, and discrimination should be exercised in the presentation of figures, for the simple reason that a mass of figures is difficult to interpret. If the wood cannot be seen for the trees then the four-weekly income statement is rendered useless.

The other five sections of the four-weekly statement drafted by Mr. Solomons comprise comparative figures for detailed working capital for the various periods, a statement of Source and Application of Funds for the current period and the cumulative period for the year to date, a cash budget, a statement of personnel turnover and one giving the familiar operating and financial ratios. It is stressed that all particulars should, if possible, be presented departmentally by the use of analysis columns and that the whole should be accompanied by a report by the accountant, interpreting the results. This last point is important, for it must never be forgotten that the management cannot, as a whole, be expected to have first-class accounting ability. Their task is the determination of policy based upon information which they may expect to have presented, as far as possible, in a non-technical form. The public are not the only ones for whom accounts need to be simplified.

Variances

I suppose the most significant work introduced into accounting terminology during the last twenty years or so is "variance", in connection with standard cost accounting and budgetary control. In the comparison of each four-weekly period the variances from the budgeted figures need to be clearly brought out and analysed, if they are to be properly interpreted and acted upon by management. Thus variances of cost from normal must be analysed into those due to (1) price change, (2) quantity variation, (3) efficiency of production; while sales variances must be divided between the first two. In connection with raw materials, variances due to forced substitutions of materials in times of shortages of any kind may further need to be revealed. In analysis of direct labour costs variances will be divisible between (1) rates of pay, (2) idle time, (3) faulty workmanship and (4) efficiency in general. Variances in scrap material must be watched and the effect of changing production activity on fixed overheads noted. These all add up to decisive facts which an alert management can use to keep profits in line with budgets, averting adverse trends, correcting and adjusting them by up-to-the-moment decisions only to be made on the basis of analyses brought to them readymade by the accountant.

Fixed and Variable Costs

A further important division of costs to be made in presenting income results to management is that between fixed and variable costs. The latter costs are over which the manage-

ment should have immediate control, while the fixed costs derive largely from long term decisions which must be ignored in determining immediate policy. There is much to be said for presenting management with a form of income statement which divides manufacturing costs, distribution costs and general and administrative costs severally into variable and fixed costs. The former are deducted from sales, and the under or over-recovered variable costs resulting from the changing of standard costs to production are also introduced. Up to this point management may have immediate control and the balance of income left for absorption of the fixed costs is clearly revealed. After this will be deducted the absorbed fixed costs, based on a flexible budget and also classified between manufacturing, distribution, general and administrative costs. The result will be net operating income, from which are deducted any unabsorbed fixed costs to arrive at net income before taxes. The essential point is that this presentation enables management to ignore the fixed costs, for the purpose of decisions as to the adoption of alternative lines of products for manufacture or alternative purchases for resale.

The Measurement of Efficiency

A sub-committee of the Incorporated Accountants' Research Committee presented a preliminary Report² on this subject together with the simple form of Operating Account illustrated on page 287.

Here we see the accountant's income statement adapted to introduce those economic factors which it is so important that management shall not ignore. The committee itself comments that the management ignores increases in productivity passed on to both consumers and employees in the shape of higher quality products or happier working conditions. Nevertheless, it succeeds in relating the monetary costs of inputs to their productive results in a manner which gives a much closer co-ordination than does the formal income statement. The ratio of the predetermined standard cost of a standard hour to the actual cost found by dividing the total actual costs revealed by the statement, for each period, by the applicable number of standard hours, will provide management with a valuable index of efficiency period by period.

²Accounting Research, Vol. II, No. 2, April 1951.

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Operating Activity

X

Input Allocations

- Labour—Wages & Salaries and Social Insurance Contributions
 - (i) Direct or operative x
 - (ii) Ancillary x x
 - (iii) Selling & Distribution
 - (iv) Administration and management x x

2. Capital:

- (i) Rents (imputed or actual)
 - Factory x Whse. x Office x x
- (ii) Depreciation of REAL ASSETS measured in terms of end-period prices
- (iii) Interest on REAL ASSETS (excluding buildings), employed during the period of account, and measured in terms- of -end-period prices

Output Value Added

- Net Sales of goods and services*
- Minus net purchases of goods and services, varying with output** x
- Changes in Inventories***
- Minus Net Purchases of goods and services related to productive facilities, NOT varying with output

X

×

3. Operating Surplus

- * After deducting returns, allowances discounts and bad debts.
- ** After deducting returns, allowances, and discounts. Indirect taxes are included in purchases.

x

X

Imputed Costs

Whatever may be said of the income statement as presented to shareholders it seems to me incontrovertible that any statement for management *MUST* have proper regard to the point of view of the economist. Thus, whether a concern owns or rents its factory buildings, an important item of cost.

^{***} Subject to the valuation suggestions made in the text.

to be taken into account in determining profit for policy purposes is rent, the reward for the use of capital. Similarly interest on all other real assets is an essential charge, for the purpose of measuring profit from one productive source as compared with that which might have been obtained by investing capital in some other direction. Full provision must also be made for the reward of management, a matter of importance in the case of unincorporated concerns, where no specific remuneration is paid to owner-managers and recorded in the financial accounts.

Depreciation

In the statement under consideration the qualifying expression "measured in terms of end-period prices", applied to both depreciation of and interest on real assets, opens up a question of the greatest importance and difficulty in this age of inflation. I shall shortly deal with it in some detail, but first let me discuss the question of depreciation in general. The economist, in connection with depreciation, distinguishes between loss due to effluxion of time and opportunity cost of the use of the particular fixed asset, the latter being represented by the cost of the most profitable alternative use to which the asset might have been put. Apart from the question of changing money values, opportunity cost could theoretically be measured as the difference between the disposable value of the asset at the beginning and end of an accounting period. The common practice of determining the charge to be made against profits on the straight line basis, the reducing instalment system or any other such percentage basis gives a result in no way connected with opportunity cost. It is this fact which presumably prompted my friend Mr. R. W. Sharwood to say: "Depreciation reserves in nearly all companies include an important amount as a provision against obsolescence and in any event took figures for depreciation, accumulated usually by equal annual instalments, do not reflect the losses that have actually occurred in the fixed assets. . . . In fact I would like to suggest to you that in many modern plants the great bulk of the loss does in fact occur just prior to the plant being scrapped and not in equal annual instalments over the life of the plant". He makes this statement in support of his contention that no amount for depreciation

Cost and Management, May 1951, p. 171, "The Measurement of Profits in Business", by R. W. Sharwood, C.A.

should be deducted from fixed assets for the purpose of determining the total amount of investment at risk and in use by the concern, though he excepts "economic loss" due to increased maintenance costs or technological improvements, which cannot be determined on any accurate basis. probably accounts for the fact that so many companies in Canada follow the practice, not recommended by the accountancy profession, of including their depreciation provisions separately on the liabilities side of the balance sheet instead of as deductions from the appropriate assets. Thus in the 1948 annual report of Aluminium Ltd. we find the president drawing attention to the fact that the company has, as a matter of deliberate policy, decided in future to report its depreciation provisions in this way, on the grounds that deduction from the assets creates "the illusion of large earnings derived from shall net plants".

He continues: "The action taken this year in making the above-mentioned alterations in the financial statements, which has the approval of the auditors, is intended to give a clearer picture of the business under the conditions which now prevail so that the shareholder and the public may more readily determine the real value of the assets required to manufacture our products, to create employment and to generate taxes and dividends".

Capital Employed

I am giving some prominence to this matter because I so strongly disagree with the practice which I have outlined. Mr. Sharwood contends that the amount of capital at risk, during each succeeding year of the working life of capital assets, remains unaffected by the reduction in that working life, simply because their productivity may remain stable for many years. On this basis a concern will have an increasing capital employed each year, to the extent of funds retained out of profits, or rather in calculating profits, to provide for depreciation. Then suddenly, when the asset becomes economically useless, the capital employed will drop to the figure with which it started. The fact that an established concern would have capital assets at all stages of their economic life would, of course, prevent any such drastic fluctuation in total capital employed, but the idea of any such fluctuation in capital employed in individual capital assets is wholly wrong. Expenditure cannot, at one and the

same time, be charged against profits and included in capital employed. The fact that the charge against profits is necessarily somewhat arbitrary in its distribution from year to year does not make it any the less essential or, over the whole life of the asset, any the less factual. Mr. Sharwood refers to the government policies of granting accelerated and double depreciation and the adoption of diminishing balance depreciation as introducing an even greater divergence of depreciation provisions from the actual economic loss of the plants concerned. This may be so, though the justification claimed for the introduction of these policies was an economic one related to the greater significance of the incidence of obsolescence in the earlier years of an asset's life. But, however we look at it, assets which are depreciating cannot be regarded as having a constant capital value simply because their earning capacity remains substantially unimpaired. Having regard to the large number of assets at varying stages of their working lives in use, at any particular time, by an established concern, the combined charge for depreciation will surely give an indication of loss of capital value with much more accurate results for the calculation of total capital employed than if it be assumed that there has been no depreciation of capital value at all, for the purposes of such calculation. The capital employed in a capital asset inevitably diminishes year by year over its working life, as the day of its retirement draws nearer, irrespective of its current productive capacity. If funds released by the depreciation provision are retained in the business then, whether they are used for buying new assets in conditions of expansion, or retained as working capital in the business, they only offset the diminution in capital value of the asset. To include in capital employed the fixed asset at original cost and the assets representing the accumulating depreciation provision is double counting of the funds. Consequently I count as highly dangerous and misleading Mr. Sharwood's suggestion "that a return computed on the basis of net profit, before deducting interest on loans, related to gross investment is the most practical measurement of profits available and should enable the shareholders and others to understand how profitably the total assets are employed". If the "others" include the management then I suggest that such a management is being misled. The "innovation" adopted in 1948 by Aluminium Ltd. increased the balance sheet totals from

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\$334,576,366 to \$586,617,554, by the setting up of "Reserves for amortisation, depreciation and depletion of lands, plants and facilities at \$252,041,188 on the liabilities side. This gives some indication of the importance of the principle involved in this particular matter, for its effect in determining the relation between profits and capital employed.

The Method of Depreciation Provision

The importance of the method of depreciation to be adopted must not be underestimated. Where circumstances indicate considerable variation in the use of an asset and therefore, presumably of income derived from such use it may well be proper to relate the periodical depreciation provision to the extent of usage, as in the case of rolling stock. But this is in effect only a variation of the straight line method which assumes the circumstances indicated above i.e. that the earning capacity of the asset remains relatively stable throughout its working life and that the depreciation may also be evenly distributed. Accepting the fact that depreciation provision is not a method of asset valuation but of expense distribution, the straight line method seems best for general purposes. As is well known, this country went over to the diminishing balance method of depreciation provision, for income tax purposes, some three years or more ago, thus adopting an outmoded system which had not long before been abandoned by Great Britain after long years of experience. Distribution on this basis is bound to be arbitrarily discriminating from year to year, and the shorter the life the greater will be the discrimination. To write down an asset in four years from \$10,000 to a scrap value of \$256 necessitates a percentage charge of 60% each year, on the reducing balance, and the four years' charges against profits will be \$6,000, \$2,400, \$960 and \$384. The rate percent under this method needs to be much greater than on the straight line basis and in fact the general doubling of rates by the income tax regulations does not allow for such rapid writing down of the assets as the straight line method permitted. In ten years at 10% per annum machinery could be completely written off under the old regulations, where as the present 20% rate on the diminishing balance basis will not write an asset costing \$10,000 down to less than \$1,074. However, what is of the greatest importance is that management should not, in its profit

calculations, ever fall into the error of adopting the income tax concessions by which under- or over-recoveries from profits, as revealed at the time of disposal of capital assets, are carried forward and allowed to affect the depreciation provisions of future years. Thus no company can properly include as an asset in its balance sheet a deferred depreciation figure representing a loss on disposal of a capital asset, as compared with its depreciated capital cost for income tax purposes. Nor can any company refrain from providing for depreciation as a charge against profits in the case of these assets bought since April 10, 1951, on which depreciation provision is to be deferred for four years by the income tax regulations. There was long a tradition in this country, down to 1948, that the books must follow the income tax requirements. Since then we have begun to move from that position, though we are still by no means free from restriction. Provisions such as the deferred depreciation requirement, however, have economic objectives which cannot, on any consideration, be allowed to affect profits, and no management must forget this. A recent bulletin of the Canadian Institute of Chartered Accountants has drawn the attention of its members to this matter. Government interpretations of income must never alter the calculation of income in accordance with generally accepted accounting principles, for the purpose of executive decisions and also for publication. The final arbiter in such matters should be the accountancy profession, not any Government authority. In this connection I cannot refrain from quoting from the president's remarks at the annual meeting of Aluminium Ltd. in April, 1952. He says. "The Canadian regulations permit the taking of depreciation on facilities under construction and further provide a considerable degree of flexibility in the taking of accelerated depreciation. When it is considered that both reported earnings and taxes payable are affected by the amounts charged to depreciation the leeway given under Canadian practice places a heavy responsibility upon your board. . . . To the extent that depreciation charges are taken in excess of the amortisation of plant spread over its estimated useful life, taxes and net earnings are reduced with the result that larger cash resources are made available internally. In order, therefore, to augment the amount of internal financing and thereby reduce the need of other methods of financing, accelerated depreciation charges

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were taken in 1951. To signalise the concept that the charges allowed under the regulations, and taken in 1951, represent something more than a fixed rate of amortisation of the facilities over their estimated useful life, as is normally implied by the word "depreciation", the term "capital cost allowance" has been used interchangeably with the term "depreciation and depletion" in last year's accounts. . . . For the year 1951 your board established depreciation charges at a rate which is calculated to increase the funds available to the Company from internal sources by a maximum amount deemed to be consistent with the interests of the shareholders, based upon the maintenance of a reasonable profit level". Nothing could better reveal the manner in which the measurement of income is actually being influenced by income tax considerations, and in this there must be an element of danger.

Incidence of Monetary Change on Individual Interests

To the extent that management succeeds in retaining in the business as capital employed a quantity of monetary capital with the same command over productive facilities as that originally invested, the real value of the common stockholder's investment will be safeguarded. Indeed, if a large part of the invested funds comes from bondholders or preferred stockholders, in times of inflation, the common stockholders will gain to the extent that the other suppliers of funds lose. But these individual gains and losses are incidental matters. It is not possible to even them out from individual to individual. Each type of investment carries its own distinctive features of which the proposing investor must take due account. The investor in long-term bonds or fixed dividend preferred stocks knows or should know that, in the course of twenty years or so he will almost certainly lose half the relative safety of his monetary investment by accepting a fixed rate of interest or priority dividend and he puts up with the attendant disadvantages. The common stockholder accepts the risks and obtains the benefit of surplus profits retained in the business as capital employed. However this may be, I suggest that the essential interests which must be the concern of all are those of the whole national economy. If our capital resources are taxed out of existence in the guise of profits, if national production (the sum total of all individual productive units) is

maintained, not extended, only by more and more investment of savings by the public, then our national standard of living is bound to deteriorate, for we shall be living on our capital. The vast undeveloped productive resources of Canada may hide the drain on invested capital but it will be no less real for that. In 1949 Mr. H. Tippet, auditor of Republic Steel Corporation, in his testimony before the Steel Board in the United States, said "that at December 31, 1948, the deficiency in reserve for depreciation on the replacement basis was at least \$195,000,000, which amounts to a mortgage on the future earnings . . . if we accept the assumption that construction cost will remain as high as the 1948 level". Since then we have had the U.S. Steel Corporation revealing abnormal price change profits of \$17,000,000 in a single quarter at the end of 1949 (and paying away \$7,000,000 of it to the government in income tax). This was the result of the steel strike which forced the company to use inventories which it was carrying on the LIFO basis at 1940 prices. \$17,000,000 is presumably the measure of the difference in prices of the same materials between 1940 and 1949. In 1950 Imperial Chemical Industries Ltd. revalued its fixed assets at current prices and more than doubled them by the addition of £96,000,000 on its balance sheet, with a like credit to two capital surpluses. Calculation of depreciation provision on the revalued figure instead of historical costs increased the charge against profits from £6,660,622 to £8,597,735 in the one year.

Changing Concepts of Business Income

It is not my task in this address to deal with the problem of amending published accounts to reflect the results of fluctuating monetary values. But I cannot refrain from drawing attention to the latest advance towards a change by the accountancy profession in its traditional acceptance of an "income" definition tacitly predicated on the assumption of unchanging money values. A special committee financed jointly by the American Institute of Accountants and the Rockefeller Foundation and comprising lawyers, economists, accountants and other businessmen, has recently published a report on its four years investigation of the changing concepts of business income. Individual members of the committee had widely differing points of view which it was difficult to reconcile. Yet

¹Changing Concepts of Business Income, MacMillan, New York, 1952.

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what is achieved by the publication surely indicates that we are on the threshold of a new accounting era. Old concepts are about to be abandoned, though they die hard, and the following conclusion forms a refreshing contrast to the negation of the older official statements of the American Institute of Accountants and the Institute of Chartered Accountants in England and Wales "For the present", says the report, "it may well be that the primary statements of income should continue to be made on bases now commonly accepted. But corporations whose ownership is widely distributed should be encouraged to furnish information, wherever it is practicable to do so, as part of the material upon which the independent accountant expresses his opinion". Thus it would seem likely that accountants themselves will soon be forced, at least to this limited extent, to depart from tradition. The report goes on "Managements must continue to accept the responsibility for choosing from among accepted methods of implementation those accounting methods that shall be adopted by the corporation under their management. The independent accountant should continue to recognize an obligation to pass upon the appropriateness of the methods employed and the fairness of the manner of their application in determining the income reported, and should assume a similar responsibility in respect of the supplementary information which forms a part of the material on which he passes. . . . Accounting will no doubt remain a compromise between theoretical and practical considerations". This brings me back to the question of management's responsibility in this connection. The professional accountant can comment only after the executive have acted and it is the industrial accountant on whom the executive will rely for information.

Depreciation, Inventories and Price Change Profit

We have already seen that management's aim should be to retain in the business, as capital employed, sufficient dollars to maintain the general productive capacity. In times of rapid inflation or deflation there are two main items in the income statement which will probably be out of line with the dollar values in which the current income and expenditure items are stated. These are the depreciation provision and the inventories. In inflation it is the understatement of the dollar value of depreciation provision and of the materials cost of sales which

leaves a gap between apparent profit and real profit. This gap consisting of price-change profit needs to be clearly brought to the notice of management each month or, at any rate, at each dividend date. In the operating statement drafted by the sub-committee of the Incorporated Accountants' Research Committee it will be remembered that depreciation was "measured in terms of end-period prices", and we saw that, by doing this, Imperial Chemical Industries eliminated £2,000,000 from revealed profits. Similarly, if the period of time between purchase and sale is long enough for inflation to have material effect extraordinary profits will be made which should be known and retained in the business as capital, to provide for replacements at higher prices. In the United States large numbers of companies to-day achieve this by the last-in-first-out method of charging out costs of materials and thus of inventory valuation. The inventories credited against costs are thus stated in dollars of a by-gone day so that, in inflation conditions, the price change profits are automatically retained in the business as a secret reserve by deduction from inventory values. This method is legal for income tax purposes in the United States but not in Canada or Great Britain.

The Use of Indices

The recommendations of the study group already referred to do not single out any particular index as the appropriate means of conversion of historical costs to their current equivalents. A committee of the American Accounting Association recently recommended the use of the U.S. Bureau of Labour Statistics general index of wholesale prices for this purpose. This is in line with the object of maintaining the general productivity of the capital employed and not merely of enabling a company to replace retired assets with exactly similar ones. The professional accountant has a reluctance to adopt indices in accounts because of his passion for facts, and the Tucker Committee in Great Britain, reporting from the income tax point of view in 1950-51, spoke of the dangers of replacing "known measures of value" by "abstractions". But what is the use of a "known measure" if it has lost all significance and is completely misleading? To-day there are reliable indices used for many official purposes and found to be of satisfactory significance, and the Dominion Bureau of Statistics index of wholesale prices is available to managements.

Conversion of the Dollar Values of Plant Units and Depreciation Provision

The industrial accountant should not find it unduly complicated to convert the dollar values of plant units, period by period, for purposes of depreciation provision. It requires briefly the following procedure:

- (1) Selection of a base year for index 100.
- (2) Expression of the cost of assets, as they are acquired, in their base year equivalent by applying the ratio of the indices of the two years.
- (3) Calculation of depreciation on the base year equivalents in (2). This can then, period by period, be converted to the appropriate charge for the period by application of the end-of-period index.
- (4) The aggregate amount of accumulated depreciation provision required at each balance sheet date may be found by multiplying the figure in (3) by the number of years of expired life, if depreciation is on the straight line basis. The excess of this sum over the dollars actually to the credit of accumulated depreciation provision will indicate the further amount to be retained out of the profits, if they are available, to make good past deficiencies. If such profits are not available then the extent of the inevitable deficiency of capital will be evident to the management.

Conclusion

What may be said of the difficulties of conversion of accounts, in the books and on published financial statements, to common dollar values, one thing seems to me certain. Such conversion, for purposes of income determination by executives, is quite essential. Management must know where it stands and a vague setting aside of special reserves, if profits seem to be available, is no answer to the dangers of the situation. This applies, of course, equally in times of inflation and deflation. I shall conclude my address on this note of the necessity for discrimination by management executives between the real and the illusory, and I am reminded of a quotation which may, perhaps, seem not inappropriate.

"Regard not then if wit be old or new,
But blame the false and value still the true." (Pope)

Maintaining a Proper Balance in Business Management

By WILLIS T. WINDLE

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The accounting department as a service department, provides the tools by which management is able to maintain a proper balance within itself. The tools suggested and described as to application are responsibility, accounting, decentralization and budgets.

The complexity of modern business with which executive management is faced to-day, far surpasses anything of a like nature heretofore encountered. There was a time when the president of a company might know personally, and work closely with, all the supervisory personnel in his organization. Now with departmentalization, decentralization and the like, necessitated by the multitudinous phases of present day operations, executives cannot even approach such close contact as was afforded their predecessors. To-day, each segment of the business is conducted by a specialist in that particular line-sales, production, accounting, etc.—each of whom is employed to handle that phase of the business. Within the framework of broad company policies each specialist makes decisions and policies required for effective accomplishment of his objectives. What makes him important to the organization is his specialized technical knowledge, a fact that precludes him from thorough intimate knowledge of the other segments. For example, the sales manager may have as his objective an ever-increasing volume of sales—to blanket the country with his products; the production manager might aim toward high production and perfection of product; and the accountant may have as his standard the mechanization of records and early closings.

From this it can be seen that the specialists, each struggling mightily for the perfection of their own operation might result in unbalanced management, with each pulling in a different direction. It is the top executive's job, then, to harness this effort and to co-ordinate the individual activities of each for the sound operation of the business as a whole. But how can

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he, not technically trained in all of these fields, show the sales manager why his sales program may be too costly; the production manager why his production program might result in excessive inventories; and the accountant why his recordings do not furnish adequate information for the future conduct of the business? Here is where we meet a relatively new specialist. Call him a cost accountant, accounting executive, financial executive, industrial accountant or what you will. His is a service function—that of furnishing the executive management with the tools it needs to measure and correlate the diverse activities of all the varied fields of operations. He provides the means by which management is able to maintain a proper balance within itself.

Perhaps the accountant's greatest responsibility is to present to management the facts that it needs to know in the clearest and most understandable form. This responsibility might be divided into two separate functions—how to get the facts, and how to present them. In my opinion, the best way to get the facts in a large corporation is through responsibility accounting, decentralization and budgets. For example:

First, Show Income and Costs by Units of Responsibility

If the figures are to tell what is out of line and who is responsible, they must be arranged by units of responsibility.

Lines of authority and responsibility must be defined so that responsibility for each element of income and cost can be fixed.

Several of the particular problems which are faced frequently are worth specific mention:

Gross Margin Responsibility. Who is responsible for gross margin? Many companies who have standard costs miss an opportunity to pin down the responsibility for gross margin. Standard costs can be used as the dividing line of responsibility between manufacturing and sales. Variations in gross margin, computed on the basis of standard costs, reflect only variations in (1) sales volume, and (2) selling prices and product "mixture". These variations are clearly sales department responsibilities.

Net Profit Responsibility. In most companies net profit responsibility can be assumed only by the chief executive because no other executive has the control of all costs that influence net profits.

Companies with a division type of organization can delegate net profit responsibility to a division manager, provided the division is self-contained, with both manufacturing and sales service functions.

Some companies have placed net profit responsibility for a product line on a product executive in the manufacturing department. Invariably this creates friction and cross-fire because such an executive has no control over sales activities, which greatly influence net profits.

Second, Organization Along Decentralized Lines

Whether we consider the works accountant in relation to the works manager or chief engineer, or superintendent, he should be "Johnny-on-the-spot" with the right figures to answer their questions. This means able personnel, careful training, and willingness to co-operate. To assure this, accounting, in my view, must be decentralized. So many questions must be answered on the manufacturing floor that the accountant has to make himself a part of the operating organization. It is difficult—I think impossible—to expect a clerk from some large cost office to give the man out on the job the information and advice he needs because the clerk from the big office will not be on speaking terms or will not be thinking in the same terms as the operating man. I remember the definition of a cost accountant which is attributed to the president of one of the large steel companies. This executive defined the cost accountant as one who tries to help someone who does not want any help, and furnishes him with figures which he does not want disclosed That situation, I believe, is prompted by frontoffice accounting, and it can be eliminated by placing the accountant in the plant where he can work with the operating man and learn to talk his language.

Third, Compare Results Against a Yardstick

It is difficult to appraise a cost or profit figure standing alone. The figure assumes much more significance when compared with a similar figure of last year, or against a standard or budgeted amount. Most Industrial Accountants agree that standard costs and budget figures make the best yardsticks for comparison.

Sales figures, either by totals or by products and territories, mean little without some knowledge of what is being sold, how

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sales are made, and how customers will determine the kind of goods they will buy.

Neither are operating costs very meaningful without an understanding of the materials, the labour, and the processes involved. For example, a budget of projected performance requires the sales and operating departments to take the primary responsibility for volume and price. The accountant is called upon to build up the cost from past experience and to put the figures in budgetary form. Neither sales, the operating department, nor accounting can work successfully in budget preparation without close co-operation. Moreover, when a budget has been formulated, it must be made effective through management action, with the accountant following results carefully to see if they do accord with the budgetary estimates.

Essentially, a budget is a plan of activities expressed in dollars. Budgeting should be the chief executive's tool for co-ordinating the plans of all departments for a coming period. This viewpoint will require each department head to prepare his own budget, with the counsel and mechanical assistance of the industrial accountant. Ultimate approval should rest with the chief executive.

When budgets are prepared in this manner, then budget figures become respected yardsticks. They cannot be dismissed as the product of an accountant's formula. Actual operating results compared against such budget figures have more meaning.

So much for the facts.

The next part of the accountant's function is the dissemination of these facts—how to present them to management.

First — Make Statements Clear and Understandable

Because of his training and temperament the Industrial Accountant can wind his way through masses of figures, observe detailed inter-relationships between figures, draw conclusions, and come out of the maze of figures as fresh as when he went in, and know exactly where he has been and what he has seen. Few non-accounting minds can do this. The non-accounting mind usually becomes lost in technicalities, tangled by the sheer mass of figures, and comes out groggy.

This difference is one of the most common causes of misunderstandings between accountants and those who do not have accounting backgrounds. It explains why non-accounting

executives often react unfavorably to financial statements which the accountant has developed with pride.

This does not mean that the accountant is any more clever than the non-accountant. It merely indicates that his background and training are particularly useful in dealing with statistical and accounting matters.

Regardless of the technical soundness and accuracy of a statement it will not be well received unless it is clear, concise, and understandable to the non-accounting executive. Readability of a statement should receive the same emphasis that an advertising agency gives to copy writing. This will require careful consideration of the volume of information that should be presented in a statement, and of the terminology used. The statement should be arranged so it is inviting to the reader.

For a long time now we have been under compulsion to answer such questions as: "What will happen to our earnings if we have a change in labour rates of 10 cents per hour?" "What will happen to our earnings with steel prices changed \$25.00 per ton?", "What will happen if volume increases 25 per cent. in a particular department?".

All of these questions can be answered quite readily by the accountant who is sufficiently statistics-minded to correlate sales with some measure of volume, such as dollar value of sales.

I refer to the conventional break-even chart with which you are all familiar. It dates back many years and it is the handiest tool I know of in answering this type of question. Familiarity with it is essential to a thorough understanding of your company's business. The break-even chart places the accountant in a position to speak authoritatively on the advisability of continuing in some marginal line of business or of retiring from the business. It helps the accountant to form an opinion as to the soundness of the relationship between cost and selling price for any of the product lines.

If you have not constructed break-even charts, I suggest you do so. I am sure you will find them most enlightening and useful.

Second — Follow Up

Follow-up probably provides the accountant with his greatest opportunity in serving management.

After the deadline is met and the monthly statements are

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completed, there is a tendency among some accountants to relax and say: "Thank heavens, that is over for another month."

Yet it is only at this point that statements are ready to serve their purposes. Only then are executives ready to interpret the statements, make decisions and take action on the basis of the information presented. Industrial Accountants can increase their usefulness by discussing the results with operating executives, assist in their interpretation and help with the operating factors at work.

The Industrial Accountant's department should be organized so that capable accountants may follow up statements and assist executives in using them.

I think that the accountant can assume an important co-ordinating function in the business picture, too. He supplies the data and in the presentation and interpretation of this data there is an opportunity to correlate the activities of such functional departments. You have all heard the remark made that the trouble with people that surround us is *not* that they do not co-operate, but that "they do not co-operate together".

The accountant has the opportunity to assist in effecting better co-operation between sales, manufacturing, and research departments. To do such a job thoroughly, or to do the whole accounting job properly, the accountant must look to his own organization to see if it too functions as it should.

There is another contribution I think the accountant can make to management. He should first understand himself, and then preach to his associates the importance of rapid turnover of inventory and of total capital investment.

The importance of turnover of inventories is quite well known. The turnover of total capital investment or net worth, on the other hand, has not been so much stressed.

A programme of expansion that does not give due consideration to capital turnover might be completely unsound. It is conceivable that the product with the highest margin of profit to sales is not the most profitable product. It may require such a large investment in plant and in inventories that actual dollars earned in the sale of the product provide a lower return on the investment than on some product with a smaller margin to sales but with a higher rate of capital turnover.

In summarizing, let me say this.

Accounting is a service function and the accounting department is a service organization. The accountant who best serves management provides the greatest amount of assistance to that management, becomes intimately acquainted with the management's problems, and assists management in analyzing problems and formulating solutions. It is, therefore, but a step to taking on the administration of these solutions, and the man who is ready can step out of the service job and take on the staff job. Look about you to see how many accountants have moved to higher positions in their companies.

Many other functional groups in a business are concerned with individual phases of these various problems we have discussed. As a rule, only the very highest levels of management are concerned with all phases of the business. Often, only through the accountant's efforts can all such phases be brought together. The accountant's opportunities in this field are limited only by his imagination, his strength of purpose and his ability to work with other members of management. If he is able to take the over-all view without conflicting with the management purposes of individual groups, he will normally be able to make significant contributions to the operating groups and the business management as a whole. Our fundamental suggestion for high level performance in this field is that the accountant work from the business management side of the picture and take the business management problems in their order of significance to the financial welfare of the company. By constructive analysis and by co-operation with the segments of the business involved, the accountant should discover unfavorable spots in the picture. make constructive suggestions, and assist in their solution.

The accountant, if he is well qualified, is in a strategic position to help guide and counsel business management in major decisions which effect the financial welfare of the company.

The accountant's specialty is to bring all specialized operations before executive managiment in terms which they will readily understand. Then executive management can co-ordinate all specialized functions of the company into a harmonious successful operating unit. In this manner the Industrial Accountant will be a creative member of management and make basically significant contributions to the successful operation of his company.

« STUDENT SECTION »

Comments by J. D. CAMPBELL, C.A., R.I.A.

ACCOUNTING I, EXAMINATION, 1952

QUESTION III (10 marks)

- (a) What is a voucher register and when should it be used?
- (b) Explain the purpose or purposes of control accounts.
- (c) A business brought forward a Bad Debt Reserve of \$4,250 at January 1st, 1951. During the year since that date it has written off Accounts Receivable \$6,000 as bad debts. At December 31st, 1951, it requires a bad debt reserve of 5% on Accounts Receivable of \$90,000. What charge against profits, in respect of bad and doubtful debts, will the business need to make at December 31st, 1951? Give details to show how you arrived at your answer.

Solution to Question III (10 marks)

- (a) The voucher register is a specialized book of original entry similar in nature to the purchase journal. By inserting in the voucher register a special column as to when paid and cheque number, the voucher register also serves in the capacity of an account payable ledger. The voucher register should be used where the concern pays by invoice and pays its accounts regularly. All purchases whether cash or on credit are routed through the voucher register. An analysis of vouchers for which cheques have not been issued at the end of the period should equal in total the balance in the voucher payable control account in the general ledger.
- (b) The benefits of the control account are:
 - (1) Enables the operation of the principle of division of labour.
 - (2) Facilitates the preparation of the financial statements.
 - (3) Facilitates internal check.
 - (4) Enables the removal of certain detail from the general ledger enabling it to be maintained at a manageable size but does not destroy its usefulness from the standpoint of the preparation of financial statements.
- (c) The entry for the writing off of the bad debts during the period would entail a debit to the reserve for bad debts of \$6,000. This would leave the account reserve for bad debts with a debit balance of \$1,750. As the balance in the account required at the end of the period was 5% of \$90,000 the charge to operations creating this reserve account would be a debit of \$6,250.

Comments

(a) The answers submitted defining the voucher register and when it should be used were very unsatisfactory and indicated that the student, in the majority of cases, had little knowledge as to the actual operations of the voucher register and the essential

- purposes which it serves. In certain cases, although the voucher register was explained, no attempt was made to determine when it should be used.
- (b) The answers submitted in respect to the control account were on the whole acceptable with the exception that in certain instances they might have been expanded.
- (c) Where the student assumed that the accounts written off were not given effect in the accounts receivable figure given in the question and proceeded to create a reserve on the basis of accounts receivable of 5% of \$84,000, no penalty was imposed providing the student indicated the nature of his assumption.

ACCOUNTING II

QUESTION III (8 marks)

Give the general journal entries to record the following:-

- April 1, 1951 Issued \$300,000 of 10-year, 5% bonds, receiving \$330,000 in cash.
- April 1, 1952 Paid annual interest on the bonds.
- April 1, 1952 Amortized the premium on bonds on a straight-line basis.
- April 1, 1952 Established a sinking fund with a first payment of \$30,000 to the trustee.
- April 1, 1952 Appropriated out of surplus an amount equal to onetenth of the bond issue.

Solution to Question III (8 marks)

1951	General Journal	
1st April	Bank \$330,000	
	Bond premium	\$ 30,000
	Bonds payable	300,000
	Issue of \$300,000 10 year 5% bonds	
1952		
1st April	Bond interest expense 15,000 Bank	15,000
	Interest 5% on \$300,000 bonds for 1 year	
	Bond premium 3,000	
	Bond interest expense	3,000

Amortization of bond premium on a

a str	aight	line	basis	1/10	x	\$30,000		
Bond	trust	ee					30,000	
To	bank	******						30,000
01	11.							

Cheque # 15 as per bond indenture		
Earned surplus	30,000	
Bond sinking fund reserve		30,000
As per bond indenture		

Comments

The major variances occurring in the solutions presented to the above question arose in respect to terminology. The item of bond interest expense was the most noticeable. Terms such as bond interest accrued and payable were prevalent in the answers.

In a number of cases the entry amortizing the bond premium showed a credit to earned surplus. This treatment failed to indicate that this entry was an adjustment of the bond interest expense.

